IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Currently Amended) An image processing apparatus comprising:

input means for inputting color image data;

generating means for generating flag data indicating an attribute of an image corresponding to the color image data from the color image data, with respect to each pixel of the image;

first pixel density converting means for pixel density converting the image data at a designated magnification;

second pixel density converting means for pixel density converting the flag data in accordance with the designated magnification; and

output means for making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein a pixel converting method of said first pixel density converting means is different from a pixel converting method of said second pixel density converting means, and

said second pixel density converting means performs a logical

arithmetic operating process of flag values using a plurality of pixels near a target pixel when the designated magnification is reduction, and performs a processing using a nearest neighboring pixel of the target pixel when the designated magnification is enlargement.

2. (Previously Presented) An apparatus according to claim 1, wherein the flag data is a character flag indicative of a character image, a figure flag indicative of a figure image, and a mesh flag indicative of a mesh image.

3. (Previously Presented) An apparatus according to claim 1, wherein when the flag data is a character flag, said output means performs a sharpness emphasis to the image data.

4. (Previously Presented) An apparatus according to claim 1, wherein when the flag data is a mesh flag, said output means performs a low pass filter process to the image data.

5. and 6. (Canceled)

7. (Original) An apparatus according to claim 1, wherein said generating means generates the flag data on the basis of a change in image data of a pixel near a target pixel.

8. (Original) An apparatus according to claim 1, wherein said first pixel density converting means uses one of a linear interpolating method and bicubic spline interpolation.

9. (Canceled)

10. (Original) An apparatus according to claim 2, wherein said output means makes a binarizing process to the image data different in accordance with the flag data.

11. (Previously Presented) An apparatus according to claim 10, wherein when the flag data is the character flag or figure flag, an error diffusion process is performed to the image data.

12. (Original) An apparatus according to claim 1, wherein said output means changes color conversion coefficients in accordance with the flag data and performs a color converting process of the image data.

13. (Canceled)

14. (Original) An apparatus according to claim 1, wherein in the case where said input means inputs data described by a page description language from a

computer, said generating means generates the flag data on the basis of attribute information of the page description language.

15. (Previously Presented) An apparatus according to claim 1, wherein said second pixel density converting means makes a converting method different in accordance with attributes of the flag data.

16. (Currently Amended) An image processing apparatus comprising:

input means for inputting color image data;

generating means for generating flag data indicating an attribute of an image corresponding to the color image data from the color image data, the flag data indicative of a character, a figure or a mesh with respect to each pixel of the image;

first pixel density converting means for pixel density converting the image data at a designated magnification;

second pixel density converting means for pixel density converting the flag data in accordance with the designated magnification; and

output means for making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein said second pixel density converting means makes a converting method different in accordance with attributes of the flag data, and

said second pixel density converting means performs a logical

arithmetic operating process of flag values using a plurality of pixels near a target pixel when the flag data is indicative of the character of the figure, and performs a processing using a nearest neighboring pixel of the target pixel when the flag data is indicative of the mesh.

17. (Currently Amended) An image processing method comprising the steps of:

inputting color image data;

generating flag data indicating an attribute of an image corresponding to the color image data from the color image data, with respect to each pixel of the image;

pixel density converting the image data at a designated magnification;

pixel density converting the flag data in accordance with the designated magnification; and

making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data to a printer,

wherein a pixel converting method of said step of pixel density converting the image data is different from a pixel converting method of said step of pixel density converting the flag data, and said step of pixel density converting the flag data includes performing a logical arithmetic operating process of flag values using a plurality

of pixels near a target pixel when the designated magnification is reduction, and performing a processing using a nearest neighboring pixel of the target pixel when the designated magnification is enlargement.

18. (Currently Amended) A computer-readable storage medium which stores a program for allowing an image processing apparatus to execute said program comprising the steps of:

inputting color image data;

generating flag data indicating an attribute of an image corresponding to the color image data from the color image data, with respect to each pixel of the image;

pixel density converting the image data at a designated magnification;

pixel density converting the flag data in accordance with the designated magnification; and

making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data to a printer,

wherein a pixel converting method of said step of pixel density converting the image data is different from a pixel converting method of said step of pixel density converting the flag data, and said step of pixel density converting the flag data includes performing a logical arithmetic operating process of flag values using a plurality

of pixels near a target pixel when the designated magnification is reduction, and performing a processing using a nearest neighboring pixel of the target pixel when the designated magnification is enlargement.

19. (Currently Amended) An image processing method comprising:

an input step, of inputting color image data;

a generating step, of generating flag data indicating an attribute of an image corresponding to the color image data from the color image data, the flag data indicative of a character, a figure or a mesh with respect to each pixel of the image;

a first pixel density converting step, of pixel density converting the image data at a designated magnification;

a second pixel density converting step, of pixel density converting the flag data in accordance with the designated magnification; and

an output step, of making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein said second pixel density converting step includes making a converting method different in accordance with attributes of the flag data, and

said second pixel density converting step includes performing a logical arithmetic operating process of flag values using a plurality of pixels near a target pixel when the flag data is indicative of the character of the figure, and performing a

processing using a nearest neighboring pixel of the target pixel when the flag data is indicative of the mesh.

20. (Currently Amended) A computer-readable storage medium which stores a program for achieving an image processing method comprising:

an input step, of inputting color image data;

a generating step, of generating flag data indicating an attribute of an image corresponding to the color image data from the color image data, the flag data indicative of a character, a figure, or a mesh with respect to each pixel of the image;

a first pixel density converting step, of pixel density converting the image data at a designated magnification;

a second pixel density converting step, of pixel density converting the flag data in accordance with the designated magnification; and

an output step, of making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein said second pixel density converting step includes making a converting method different in accordance with attributes of the flag data, and

said second pixel density converting step includes performing a logical arithmetic operating process of flag values using a plurality of pixels near a target pixel when the flag data is indicative of the character of the figure, and performing a

processing using a nearest neighboring pixel of the target pixel when the flag data is indicative of the mesh.

21. (Previously Presented) An image processing apparatus comprising:

input means for inputting color image data;

generating means for generating flag data indicating an attribute of an image corresponding to the color image data from the color image data;

first pixel density converting means for pixel density converting the image data at a designated magnification;

second pixel density converting means for pixel density converting the flag data in accordance with the designated magnification; and

output means for making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein said first pixel density converting means gives an offset to a start position of an output pixel position so that an output pixel value after pixel density converting the image data is generated by interpolation calculation between the neighboring adjacent pixels.

22. (Previously Presented) An image processing method comprising:

an input step, of inputting color image data;

a generating step, of generating flag data indicating an attribute of an image corresponding to the color image data from the color image data;

a first pixel density converting step, of pixel density converting the image data at a designated magnification;

a second pixel density converting step, of pixel density converting the flag data in accordance with the designated magnification; and

an output step, of making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein said first pixel density converting step includes giving an offset to a start position of an output pixel position so that an output pixel value after pixel density converting the image data is generated by interpolation calculation between the neighboring adjacent pixels.

23. (Previously Presented) A computer-readable storage medium which stores a program for achieving an image processing method comprising:

an input step, of inputting color image data;

a generating step, of generating flag data indicating an attribute of an image corresponding to the color image data from the color image data;

a first pixel density converting step, of pixel density converting the image data at a designated magnification;

a second pixel density converting step, of pixel density converting the flag data in accordance with the designated magnification; and

an output step, of making a process of the pixel density converted image data different every pixel in accordance with the flag data and outputting the processed image data,

wherein said first pixel density converting step includes giving an offset to a start position of an output pixel position so that an output pixel value after pixel density converting the image data is generated by interpolation calculation between the neighboring adjacent pixels.